

WHAT IS CLAIMED IS:

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1. A method of providing indicia on a substrate, the method comprising:
screen printing a substrate to make a decorated portion and a laser ablation portion on the substrate; and
laser ablating the laser ablation portion to provide the indicia on the substrate.
 2. The method of Claim 1, further comprising firing the decorated and laser ablation portions after the laser ablating step.
 3. The method of Claim 2, further comprising bending the substrate after the laser ablating step.
 4. The method of Claim 3, wherein the substrate is bent during the firing step.
 5. The method of Claim 1, further comprising bending the substrate after the screen printing step.
 6. The method of Claim 1, further comprising bending the substrate after the laser ablating step.
 7. The method of Claim 1, wherein the indicia comprises serialization information.
 8. The method of Claim 1, wherein the indicia comprises manufacturing information.
 9. The method of Claim 1, wherein the indicia comprises a serial number, bar code, patch code, logo or combination thereof.
 10. The method of Claim 1, wherein the substrate comprises glass.
 11. The method of Claim 1, wherein the substrate comprises automotive glass.
 12. The method of Claim 11, wherein the decorated portion comprises a border around a periphery of the automotive glass.
 13. The method of Claim 11, wherein the decorated portion comprises a part number of the automotive glass.
 14. The method of Claim 11, wherein the decorated portion comprises a logo.
 15. The method of Claim 11, wherein the indicia comprises manufacturing information of the automotive glass.

16. The method of Claim 11, wherein the indicia comprises an automobile serial number.

17. The method of Claim 1, wherein the screen printed material has a composition comprising from about 35 to about 75 weight percent glass frit, from about 5 to about 40 weight percent pigment, from zero to about 25 weight percent crystal seed powder, and from about 10 to about 40 weight percent printing medium.

18. The method of Claim 1, wherein the screen printed material has a composition comprising from about 40 to about 60 weight percent glass frit, from about 10 to about 35 weight percent pigment, from zero to about 25 weight percent crystal seed powder, from zero to about 10 weight percent metal and/or metal oxide materials, and from about 15 to about 40 weight percent printing medium.

19. A method of providing indicia on automotive glass, the method comprising:

screen printing the automotive glass to make a decorated portion and a laser ablation portion on the automotive glass; and

laser ablating the laser ablation portion to provide indicia on the automotive glass.

20. The method of Claim 19, further comprising firing the decorated and laser ablation portions after the laser ablating step.

21. The method of Claim 20, further comprising bending the automotive glass after the laser ablating step.

22. The method of Claim 21, wherein the automotive glass is bent during the firing step.

23. The method of Claim 19, further comprising bending the automotive glass after the screen printing step.

24. The method of Claim 19, further comprising bending the automotive glass after the laser ablating step.

25. The method of Claim 19, wherein the decorated portion comprises a border around a periphery of the automotive glass.

26. The method of Claim 19, wherein the decorated portion comprises a part number of the automotive glass.

27. The method of Claim 19, wherein the decorated portion comprises a logo.

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28. The method of Claim 19, wherein the indicia comprises a serial number, bar code, patch code, logo or combination thereof.

29. The method of Claim 19, wherein the indicia comprises serialization information.

30. The method of Claim 19, wherein the indicia comprises manufacturing information of the automotive glass.

31. The method of Claim 19, wherein the indicia comprises an automobile serial number.

32. The method of Claim 19, wherein the screen printed material has a composition comprising from about 35 to about 75 weight percent glass frit, from about 5 to about 40 weight percent pigment, from zero to about 25 weight percent crystal seed powder, and from about 10 to about 40 weight percent printing medium.

33. The method of Claim 19, wherein the screen printed material has a composition comprising from about 40 to about 60 weight percent glass frit, from about 10 to about 35 weight percent pigment, from zero to about 25 weight percent crystal seed powder, from zero to about 10 weight percent metal and/or metal oxide materials, and from about 15 to about 40 weight percent printing medium.

34. A screen printed substrate comprising a screen printed decorated portion and a screen printed laser ablation portion configured for subsequent laser ablation.

35. The screen printed substrate of Claim 34, wherein the substrate comprises glass.

36. The screen printed substrate of Claim 34, wherein the substrate comprises automotive glass.

37. The screen printed substrate of Claim 36, wherein the decorated portion comprises a border around a periphery of the automotive glass.

38. The screen printed substrate of Claim 36, wherein the decorated portion comprises a part number of the automotive glass.

39. The screen printed substrate of Claim 36, wherein the decorated portion comprises a logo.

40. The screen printed substrate of Claim 36, wherein the indicia comprises manufacturing information of the automotive glass.

41. The screen printed substrate of Claim 36, wherein the indicia comprises an automobile serial number.

42. A screen printed and laser ablated substrate comprising:
a screen printed decorated portion of the substrate; and
a screen printed and laser ablated portion of the substrate.
43. The screen printed and laser ablated substrate of Claim 42,
wherein the substrate comprises glass.
44. The screen printed and laser ablated substrate of Claim 42,
wherein the substrate comprises automotive glass.
45. The screen printed and laser ablated substrate of Claim 44,
wherein the decorated portion comprises a border around a periphery of the automotive
glass.
46. The screen printed and laser ablated substrate of Claim 44,
wherein the decorated portion comprises a part number of the automotive glass.
47. The screen printed and laser ablated substrate of Claim 44,
wherein the decorated portion comprises a logo.
48. The screen printed and laser ablated substrate of Claim 44,
wherein the indicia comprises manufacturing information of the automotive glass.
49. The screen printed and laser ablated substrate of Claim 44,
wherein the indicia comprises an automobile serial number.
50. A screen printing screen comprising a decoration portion and a
separate laser ablation portion.
51. The screen printing screen of Claim 50, wherein the decoration
portion comprises a border around a periphery of the screen.
52. The screen printing screen of Claim 50, wherein the decoration
portion comprises an automotive glass part number.
53. The screen printing screen of Claim 50, wherein the decoration
portion comprises a logo.
54. The screen printing screen of Claim 50, wherein the laser ablation
portion is configured to provide indicia.
55. The screen printing screen of Claim 54, wherein the indicia
comprises a serial number, bar code, patch code, logo or combination thereof.
56. The screen printing screen of Claim 54, wherein the indicia
comprises automotive glass manufacturing information.
57. The screen printing screen of Claim 54, wherein the indicia
comprises an automotive serial number.